

Amendment to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. – 6. (canceled)
7. (original) An electrode comprising:

a conductive metal substrate; and

a first layer comprising a matrix with a catalytic powder dispersed therethrough, the matrix comprising a platinum group metal oxide or a mixture of a platinum group metal oxide and a valve metal oxide, the catalytic powder comprising support metal particles covered with a porous coating, the porous coating comprising an electrocatalytic metal.
8. (original) The electrode of Claim 7 wherein the porous coating further comprises a particulate material in admixture with the electrocatalytic metal.
9. (original) The electrode of Claim 7 wherein the conductive metal substrate is nickel, iron, steel, stainless steel, cobalt, copper, or silver.
10. (original) The electrode of Claim 7 wherein the support metal particles in the catalytic powder are nickel, cobalt, iron, steel, stainless steel, or copper.
11. (original) The electrode of Claim 7 wherein the electrocatalytic metal in the porous coating of the first layer is ruthenium, iridium, rhodium, osmium, platinum, palladium, rhenium, or a mixture thereof.
12. (original) The electrode of Claim 8 wherein the particulate material in the porous coating of the first layer is a metal oxide particulate material selected from the group consisting of a platinum group metal oxide, rhenium oxide, technetium oxide, molybdenum oxide, chromium oxide, niobium oxide, tungsten oxide, tantalum oxide, manganese oxide and lead oxide.
13. (original) The electrode of Claim 7 wherein the platinum group metal oxide in the matrix is ruthenium oxide, iridium oxide, osmium oxide, platinum oxide,

palladium oxide or a mixture thereof; and the valve metal oxide in the matrix is titanium oxide, zirconium oxide, tantalum oxide, tungsten oxide, niobium oxide, bismuth oxide, or a mixture thereof.

14. (original) The electrode of Claim 7 further comprising a second reinforcement layer consisting essentially of a transition metal or alloy thereof.

15. (original) The electrode of Claim 14 wherein the transition metal or alloy thereof is nickel, cobalt, copper, or alloys thereof with phosphorous, boron or sulfur.

16. (currently amended) A process for making an electrode comprising the steps of:

forming a catalytic powder by covering a plurality of support metal particles with a porous coating comprising an electrocatalytic metal in admixture with a particulate material;

mixing the catalytic powder with a dispensing medium to form a mixture;

applying the mixture to a conductive metal substrate to form a covered substrate; and

baking the covered substrate in the presence of oxygen.

17. (canceled)

18. (currently amended) The process of Claim ~~47~~16 wherein the porous coating is formed by a nonelectrolytic reductive deposition method, an electrodeposition method or a sintering method.

19. (currently amended) The process of Claim ~~47~~16 wherein the electrocatalytic metal in the porous coating is ruthenium, iridium, rhodium, osmium, platinum, palladium, or a mixture thereof.

20. (currently amended) The process of Claim ~~47~~16 wherein the particulate material in the porous coating is a metal oxide particulate material selected from the group consisting of a platinum group metal oxide, rhenium oxide, technetium oxide, molybdenum oxide, chromium oxide, niobium oxide, tungsten oxide, tantalum oxide, manganese oxide, lead oxide and a mixture thereof.

21. (original) The process of Claim 16 wherein the applying step is performed using solvent spraying, electrostatic spraying, plasma spraying, or melt spraying.

22. (original) The process of Claim 16 wherein the dispensing medium comprises a mixture of a platinum group metal oxide precursor and a valve metal oxide precursor.

23. (original) The process of Claim 22 wherein the platinum group metal oxide precursor is ruthenium chloride; and the valve metal oxide precursor is titanium alkoxide, tantalum alkoxide, zirconium acetylacetonate, or niobium alkoxide.

24. (original) The process of Claim 22 wherein the dispensing medium further comprises aluminum chloride or zinc chloride.

25. (original) The process of Claim 24 wherein the dispensing medium further comprises a solvent selected from the group consisting of methanol, ethanol, 1-propanol, 2-propanol, butanol and a mixture thereof.

26. (original) The process of Claim 16 further comprising the step of plating the coated substrate with a transition metal or a transition metal alloy to form a reinforcement layer.

27. (original) The process of Claim 26 wherein the transition metal is nickel, cobalt, copper or an alloy thereof with phosphorous, boron or sulfur.